# SEVEN SCIENTISTS ADVISE

The Scientific Advisory Committee of the International Atomic Energy Agency held its second series of meetings in Vienna on 4 - 5 June 1959. The Committee, which first met at United Nations Headquarters on 14 - 15 November 1958, had been appointed a few days earlier by the IAEA Board of Governors on the basis of nominations submitted by the Agency's Director General. The members of the Committee are seven distinguished scientists from different countries: Dr. H.J. Bhabha (India), Sir John Cockcroft (UK), Professor V.S. Emelyanov (USSR), Dr. B. Goldschmidt (France), Dr. B. Gross (Brazil), Dr. W.B. Lewis (Canada) and Professor I.I. Rabi (USA). The membership is identical with that of the Scientific Advisory Committee of the United Nations Secretary-General.

The Director General, Mr. Sterling Cole, is Chairman of the Committee, but its technical discussions have been presided over by Dr. W. B. Lewis who was elected Vice Chairman.

The function of the Committee is to provide the Director General and through him the Board of Governors with scientific and technical advice on questions relating to the Agency's activities. Subjects for consideration by the Committee can be submitted by the Director General either on his own behalf or on behalf of the Board,

At its recent session, the Committee considered several aspects of the Agency's scientific programme, including the proposed conferences, symposia and seminars for 1960, scientific and technical publications, and the research contracts which had been or were to be awarded by the Agency. The programme of conferences for the current year had been approved earlier by the Board of Governors on the recommendation of the Committee. A provisional list of 17 conferences, symposia and seminars for 1960 was examined by the Committee and recommendations were made to the Director General. The Committee also examined the Agency's policy on the award of contracts for research work and studies.

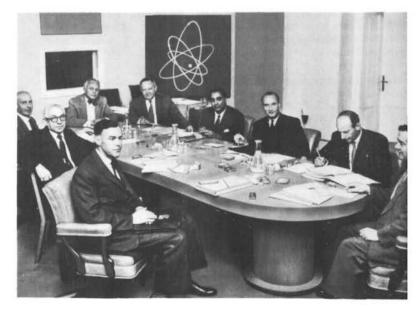
### Agency Safeguards

An important subject before the Committee was the principles and regulations for the application of Agency safeguards. Under its Statute, the Agency is authorized to establish and administer a system of safeguards in order to ensure that assistance provided by it or at its request is not used to further any military purpose. It may also, if so requested, apply this system to a State's own nuclear activities or to any bilateral or multilateral arrangement. In addition, it must establish certain safeguards in regard to health and safety. Accordingly, the Agency has been trying to work out a system that would enable it to fulfil these Statutory duties. Certain draft regulations for the application of safeguards were placed before the Committee for its consideration. The Committee's recommendations on the scientific considerations involved in these regulations will be of special importance in evolving an international system of safeguards.

Another subject considered by the Committee was the possibility of a project for an exchange of knowledge on controlled thermonuclear fusion. Work on controlled fusion and plasma physics has been proceeding at several research establishments in different countries. The 1958 Geneva Conference provided an opportunity for an exchange of some information on this subject, but in view of the rapid pace of research and development, it might be useful to devise some method of exchange of knowledge on a continuing basis. This would be of special interest for smaller countries starting work in this field.

The Committee also examined a proposal for the determination of the world-wide distribution of hydrogen and oxygen isotopes in water. Such a study might be a useful line of research for dealing with two large groups of problems which are intimately connected with the circulation of water in nature. One is the

> The Scientific Advisory Committee in session at IAEA headquarters, Vienna. Seated round the table (from right), Dr. W.B. Lewis, Dr. H. Seligman (IAEA), Dr. B. Goldschmidt, Dr. H.J. Bhabha, Prof. V.S. Emelyanov, Mr. Sterling Cole, Dr. B. Cross, Prof. I. I. Rabi, Dr. R. Spence (alternate for Sir John Cockcroft).



proper use of continental water resources for technical and agricultural production, and the other is the disposal of radioactive wastes on land and in the sea. Exact information on the distribution of hydrogen and oxygen isotopes in rain, in rivers, in ground water and in oceans would be important for areas with limited water supply, and would add to the present knowledge of potential water resources in arid and semi-arid regions.

Among other subjects considered by the Committee was the preparation of a basic manuscript on atomic energy and its peaceful uses, which could serve as an aid to teachers in secondary schools, particularly in the technically less advanced countries. The IAEA Board of Governors has already approved the project for such a manual, which will be prepared in co-operation with UNESCO.

# MEMBERS OF THE COMMITTEE

## Homi Jehangir BHABHA

Educated in Bombay and at Cambridge University, Dr. Bhabha carried out research on cosmic radiation and certain other aspects of theoretical physics. Since 1945 he has been Director of the Tata Institute of Fundamental Research in India. He is Chairman of the Indian Atomic Energy Commission and Secretary, Department of Atomic Energy, Government of India. Dr. Bhabha presided over the 1955 Geneva Conference, and is a member of the IAEA Board of Governors.

## John Douglas COCKCROFT

Sir John studied at Manchester and Cambridge Universities, and conducted fundamental research and taught physics at Cambridge for a number of years. Together with Dr. E. T. S. Walton, he was the first to split the atom by artificial means (1932); they received the Nobel prize in 1951. For several years Sir John was Director of the Atomic Energy Research Establishment at Harwell, and until recently he was Member for Research at the UK Atomic Energy Authority.

#### Vasilij S. EMELYANOV

Professor Emelyanov graduated from the Moscow Mining Academy and in 1938 became Professor of Electro-Metallurgy at the Moscow Steel Institute. In 1953 he was elected to the Soviet Academy of Sciences. Head of the Central Board on the Use of Atomic Energy of the USSR Council of Ministers, Professor Emelyanov is a member of the IAEA Board of Governors.

## Bertrand GOLDSCHMIDT

Dr. Goldschmidt studied at the Physics and Chemistry School of the Faculty of Science, Paris, and later worked at the Curie Laboratory. During 1942-46 he was associated with atomic energy research projects in Canada and the United States. In 1946 he became Head of the Chemistry Division and in 1953 of the External Liaison Division of the French Atomic Energy Commission (Commissariat à l'énergie atomique). Dr. Goldschmidt is also a member of the IAEA Board of Governors.

#### Bernhard GROSS

Educated at Stuttgart, where he became Doctor of Engineering, Dr. Gross went to Brazil in 1934 and is Head of the Department of Electrical Measurements at the Brazilian National Institute of Technology. His scientific work includes research in the fields of cosmic rays, dielectrics and fallout in the atmosphere.

#### Wilfrid Bennet LEWIS

Vice President for Research and Development of Atomic Energy of Canada Ltd., Dr. Lewis was educated at Cambridge University where he did research work at the Cavendish Laboratory, 1930-1939. During the war he was engaged in developing radar and during 1946-1952 was Director of the Atomic Energy Division of the Canadian National Research Council.

#### Isidor I. RABI

Dr. Rabi was educated at Cornell and Columbia Universities, and later became Professor of Physics at Columbia. He received the Nobel prize for physics in 1944. Dr. Rabi has been associated with major atomic energy projects and scientific committees in the United States and was Chairman of the General Advisory Committee, US Atomic Energy Commission.

> The Atomic Energy Commission of Honduras was inaugurated on 21 October 1958. Photograph shows the Foreign Minister, Lic. Andrés Alvarado Puerto, administering the oath of office to the members of the Commission. The President of the Commission, Dr. Jesus Aguilar Paz, is fifth from the left

